

Introduction

As proponents for Army installation transformation, the Office of the Assistant Chief of Staff for Installation Management (OACSIM) and the U.S. Army Corps of Engineers (USACE) determined that a fresh look was needed at the issues and strategies concerning the role of installations in supporting the Objective Force. To initiate this effort, an installation transformation game was sponsored by OACSIM and organized by USACE. Participants included senior leaders from across the Services, the Office of the Secretary of Defense, other federal agencies, academia, professional societies, and industry.

Out-of-the-box thinking was encouraged as game participants sought to address key challenges likely to face installations, not only for the initial rollout of the Objective Force, but also as materiel systems, doctrine, and training requirements evolve over the next 30 years. The game was designed and facilitated by Toffler Associates, an industry consultant in the areas of organizational change and adjustment. The game was held Dec. 6, 2001, at the Johns Hopkins University Applied Physics Laboratory in Laurel, MD.

Based on data collected during the game, findings and recommendations were produced, representative of leadership consensus on key issues. These issues help to focus attention on processes and metrics to be addressed as a transformation of installation management (TIM) organization is established. In addition, modeling and simulation (M&S) will be used to address these issues under the USACE "Fort Future" initiative. (Refer to Fort Future article on Page 14 of this magazine.) This article describes the objectives of the game, key findings, and actions that have been initiated in response to the game to further support Army transformation.

INSTALLATION TRANSFORMATION GAME

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Game Objectives

The key objective of the game was to identify dominant variables that should govern design and modeling of installations to support Army transformation. An ancillary goal was to identify mechanisms for accelerating installation transformation to meet the needs of future forces. Key issues were used as discussion points. Future installations should provide or facilitate the following:

- More rapid and effective deployment and sustainment of U.S. forces,
- Higher levels of unit training and readiness,
- Enhanced force protection and survivability,
- Enhanced well-being of Service members and their families, and
- Versatility and flexibility to respond to continuous changes in forces.

Approach

The game was set in the year 2015 and was conducted over the course of 1 day using a seminar-style approach. It consisted of two radically different installation concepts that were exercised in two game moves. The concepts were not designed to posit a particular recommended installation design, but

rather to illustrate opposite extremes to provoke debate. The two extremes were as follows:

- "Fort Autonomy": A "mega-complex" of bases, each fully self-contained and secured from their surrounding communities. All operations-related and "well-being" infrastructures are inside the wire.
- "Fort Synergy": A distributed, mutually supporting "web" of bases, each highly integrated with their surrounding communities. Installations are solely operations-focused, with all well-being functions integrated with the community.

Move one had two steps. The first step required each installation to deploy Objective Forces overseas as part of a Joint Task Force operation. The second step required the installations to backfill and train Legacy Force Army National Guard and Reserve units to prepare for subsequent deployment as reinforcements.

Move two was a plenary session with the purpose of capturing the dominant variables that must be considered in the design and function of future installations that will allow them to be integral and highly valuable components in the Nation's overall future warfighting capability. In reality, the objective was to create

a mission essential task list (METL) for future installations.

The game concluded with a plenary session in which all participants individually identified an issue about which they felt they had gained new insight, as well as how that insight would influence a particular action they would take in support of installation transformation. Toffler Associates analyzed all the information from the game and incorporated the additional insights gained from the preliminary preparation, interviews, and workshops that preceded the game.

Primary Findings

A wealth of findings resulted from the game, based on analysis of the discussions during the game and breakout group presentations. Only the primary findings are presented here. A preponderance of opinion supported the following primary findings:

- All Services are engaged in the process of transforming their installations and facility functions. As a whole, however, these transformations are not being performed in concert.
- Installation transformation must begin now and must be integral to the overall Army transformation effort.
- Future installations will have much greater interdependencies on the surrounding communities.

- Future installations require greater flexibility and adaptability to support evolutionary change.

- Processes for transforming installations need to be streamlined.

- Adaptation of the Army's METL and Doctrine, Training, Leader Development, Organization, Materiel and Soldiers (DTLOMS) concepts could significantly assist in installation transformation.

Game Conclusions

The following conclusions were drawn from the findings and analysis of game results:

- METLs for installations will materially assist in transformation decisionmaking. A consistent, METL-driven approach to planning will allow planning decisions to be evaluated against their mission.

- Installations must transform in synchronization with Army combat force transformation. Otherwise, combat force transformation is at risk.

- Different approaches to critical infrastructure can enhance unit readiness and deployment capability. Design elements with increased flexibility can enhance the capability of installations to change force structure and material systems.

- Three of the game hypotheses (dealing with reduced costs, enhanced environmental stewardship, and increased wellness) require further and more detailed trade-off

analysis in a future decision-support system for installations.

- The transformation process for installations needs to be a joint endeavor among the Services.

The Way Forward

The installation transformation game led to a remarkable consensus among Army and joint leaders in identifying key challenges that installations will face in the first half of the 21st century. As a result of the findings and recommendations that emerged from the game, the OACSIM agreed to move ahead on several options in the context of standing up the new TIM organization. As part of its responsibilities under the Army Transformation Campaign Plan, USACE and its Engineer Research and Development Center (ERDC) will provide support to OACSIM in developing these options.

The first key focus area is to develop installation METLs. Mission drives all installation requirements, so METLs will help installations evaluate planning options with a view toward their contribution to an essential task. For instance, one proposal developed and validated in the game has a top line mission to sustain combat capability. There are four essential tasks: protect the force, move the force, sustain combat readiness, and aid retention and recruiting. Under this scenario, decisions about infrastructure, environment, and cultural resources would



Game participants used groupware facilities to rapidly generate and capture responses.

be evaluated against metrics developed for this METL. Installations with different missions will have different METLs, but those with similar missions will have the same METLs.

Metrics

Effective use of METLs requires the development of metrics. Although metrics exist for various purposes throughout the Army, there was agreement during the game that adequate metrics do not exist that would allow modeling of functions such as combat capability throughput and ecosystem impact in a decision support system for installations.

New Army requirements are evaluated for their impact on DTLOMS. No new programs occur without a DTLOMS evaluation. With METLs and metrics in place, proposed transformation requirements can be evaluated for installation management, design, and function. Similarly, new installation developments should be evaluated for their impact on contingency operations, force structure, people, and other factors.

OACSIM has approved the stand-up of an installation battle lab to provide analysis and decision support capability for installation transformation. Established in 1992 at the U.S. Army Training and Doctrine Command, the battle lab concept subjects new ideas to qualitative and quantitative analysis before the Army invests in change. ERDC is working with OACSIM to create a virtual battle lab organization for installations, allowing more flexibility and outreach in developing task-oriented teams to address specific issues.

Installation M&S is a new science and technology objective for the Army. The new initiative, informally known as Fort Future, uses simulations of Army installations to explore ramifications of design and planning decisions on force projection, the ability to train, military construction, force protection, and well-being for the Objective Force. As a result of the installation transformation game, Fort Future will be designed to support METLs and metrics for

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installation performance as they are adopted.

Support for facility design, both within the cantonment area and on training lands and ranges, is necessary to accelerate the pace of transformation. Under the current military construction process, delivery of a new facility can take from 5 to 7 years for a large project, depending also on timely completion of analysis required under the National Environmental Policy Act (NEPA) of 1970. In addition, fielding of the Future Combat Systems under the unit set fielding process will depend in part on facilities that meet the proper requirements. An important part of Fort Future is a requirements-driven design process with advanced visualization capability to ensure that facilities will actually work with the equipment for which they are designed.

Conclusion

The installation transformation game achieved its purpose. Diverse,

well-informed, and motivated senior leaders took a hard look at the role of future installations. They identified the major issues that must be addressed to facilitate successful transformation of installations in sync with the Army transformation goals and developed strategies for dealing with those issues. The game created the necessary momentum and focus to help the installation community fulfill its role in achieving the Objective Force.

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